



**Susitna Basin
Recreation Rivers
Management Plan**

Department of Natural Resources
Division of Land
Land & Resource Section

A P P E N D I X H

**WETLANDS AND FLOODPLAINS
IN THE
RECREATION RIVERS**

A U G U S T 1 9 9 1

APPENDIX H

Wetlands and Floodplains in the Recreation Rivers

Introduction

This report is an appendix of the Susitna Basin Recreation Rivers Management Plan. Goals, objectives, management intent, and guidelines in Chapter 2 of the Plan refer to riparian management areas. Two variables used to delineate these areas are the location of floodplains and wetlands. This appendix shows these. Rivers are shown in the same order as in the Plan: Little Susitna River, Deshka River, Talkeetna River, Lake Creek, Talachulitna River, and Alexander Creek. For more information about this publication, contact the Project Manager, Dept. of Natural Resources, Div. of Land & Water, Land & Resources Section, P. O. Box 107005, Anchorage, AK 99510-7005, or call 762-2660.

Wetlands Mapping

The wetlands shown on the following pages were mapped by the U. S. Fish and Wildlife Service. Only wetlands in the Recreation Rivers were mapped. The source material for this document was primarily from stereoscopic analysis of high altitude aerial photographs. Wetlands were identified on the photographs based on vegetation, visible hydrology, and geography. Actual wetlands may vary from those shown in this plan appendix. Wetlands mapping is dependent on the year the aerial photos were taken. Wetlands vary somewhat from year to year depending on rainfall, streams changing course, and other factors. Because of map scale wetland and non-wetland areas less than two acres are not shown.

Wetlands Definition

The definition for wetlands used in this appendix is from the National Wetlands Classification System. The U. S. Fish and Wildlife Service, in cooperation with other federal agencies, state agencies, and private organizations and individuals, developed a wetlands definition for conducting an inventory of the nation's wetlands. This definition was published in the U. S. Fish and Wildlife Service's publication "Classification of Wetlands and Deep-water Habitats of the United States" (Cowardin, et al. 1979). Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. The definition used in this plan varies from the regulatory definition used by the Alaska Coastal Management Program and federal agencies for regulatory purposes.

The definition of "wetlands" used by the National Wetlands Inventory is, "lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water." For purposes of this classification wetlands must have one or more of the following three attributes:

- 1) at least periodically, the land supports predominantly hydrophytes,
- 2) the substrate is predominantly undrained hydric soil, and
- 3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year."

This definition includes both vegetated and non-vegetated wetlands, recognizing that some types of wetlands lack vegetation (e.g. sandbars).

For purposes of this management plan, wetlands are further divided into two classes. **Contiguous wetlands** have a visible surface water connection with the recreation rivers or their tributaries. **Non-contiguous wetlands** have no apparent surface water connection.

Jurisdiction over Wetlands

Wetlands shown in this appendix do not define the limits of proprietary jurisdiction for any federal, state, or local government or establish the geographical scope of other regulatory programs. Those intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Additional Information on Wetlands

For additional information on wetlands in the Recreation Rivers including statewide priorities for acquiring wetlands and protection mechanisms for wetlands, see the Recreation Rivers Management Plan Resource Assessment, 1991 or contact Jonathan Hall with the U. S. Fish and Wildlife Service, National Wetlands Inventory, 1011 E. Tudor Rd. or call 786-3471.

Floodplains

The floodplains mapped in this appendix includes the area that would be inundated by a 100-year flood, a flood that would be expected to occur on the average once every 100 years, or the area that has a one-percent chance of being flooded in any given year. Most of the data in this report was derived from the Soil Conservation Service 1972 and 1982 reports and the 1972 Army Corps of Engineers floodplain reports on the Little Susitna River, Deshka River (Moose and Kroto creeks), Talkeetna River, and Talachulitna River. No floodplain data has been published for Lake and Alexander creeks. The floodplain boundaries for rivers not included in these reports were developed by hydrologist Stan Carrick with the Division of Geological and Geophysical Surveys (DGGS) by comparing aerial photos with USGS 1:63,360 maps. On the upper reaches of the rivers, the floodplains are confined to the river banks and delineated by the width of the creeks shown on USGS maps. For more information on the floodplains shown in this report, see the Plan Resource Assessment, 1991 or contact DGGS, P. O. Box 772116, Eagle River, AK 99577 or call 696-0070.

Other Factors

Other variables used to delineate riparian management areas referred to in the Plan can be determined from other sources. The location of ordinary-high water and 100-foot stream buffers are too small to be shown on the maps in this appendix and can be located by an on-site inspection or review of aerial photographs. The location of fish-bearing streams can be determined by consulting the Alaska Department of Fish and Game catalog of anadromous waters or by contacting the Habitat Division. The acreage of the lakes can be determined from measuring the size of the lakes on the following maps.